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ART. XIII.—On Some New Species of Victorian Marine Mollusca.

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(With Plate IX.).

[Read 11th July, 1912.]

This paper contains the description of three new species of bivalve shells.

Montacuta dromanaensis, sp. nov. (Pl. IX., Figs. 1-4).

Shell minute, sordid white, very inequilateral, finely ornamented with concentric, irregularly undulating striae : the re-set are distinctly capped by what appears to be the early stage of growth. Equivalve.

Dimensions of Type.—Anterior-posterior diameter 1.6, dorsoventral diameter 1.2 mm.

Locality.—Type from Dromana San Remo (T. Worcester). Dredged between Phillip and French Islands, Western Port.

Obs.—This species can be readily separated from our other forms by its concentric sculpture. Type in Mr. Gatliff's collection.

Condylocardia chapmani, sp. nov. (Pl. IX., Figs. 5-8).

Shell minute, white, shining, transparent, hinge being discernible from the outside through the shell. Very inequilateral. Ovate, inflated. Lunule slightly discernible. There are three growth lines visible. Equivalve.

Dimensions of Type. - Anterior-posterior diameter 1.4, dorso-ventral diameter, 1 mm.

Locality.-Type dredged off Portsea, Port Phillip; Ocean Beach, Point Nepean; Torquay.

Obs.—A very small, smooth, simple form. Type in Mr. Gatliff's collection.

Modiolaria rhyllensis, sp. nov. (Pl. 1X., Figs. 9, 10).

Shell small, equivalve, suboblique, profoundly convex, semitransparent, horny colour. Valves thin, fragile. Umboes prominent, with the beaks projecting and slightly incurved to the anterior; the umbonal swelling giving rise to a somewhat sharp slope to the anterior, but a more gradual dip, and with a manifest concavity to the posterior. The anterior border is straight and decidedly produced posteriorly.

As regards sculpture, the shell is adorned with closely-set, radiating ribs, whose surfaces are obtuse and slightly raised from their

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similarly spaced interstices. Two or three intercalating ribs appear. The area occupied by the central third bearing ribs fewer in number, but of greater substance. The shell is further ornamented with about twenty irregularly-parted, fine, concentric lamellae, which are difficult to enumerate, owing to their frequent discontinuity. The unsculptured portion, generically characteristic, appears in the anterior third, resolving itself into a narrow beam about the width of two ribs, and two grooves. This divides an anterior flank of sixteen ribs from a flank of, approximately, ninety-five to the posterior. The umbonal region is marked by an encircling furrow, situated about onesixth the length of shell; this discriminates two sets of sculpture, the main ornamental ribs terminating at the furrow; the umbonal ornament is much finer, assuming more the character of radial threads crossed by numerous and stronger lines of growth. This latter area is lighter in colour, and above the level of the shell, forming a sort of cap. Hinge normal. Ligament internal, linear. Muscle scars not clearly defined; pallial impression obscure. Inner margin crenulated by the radial sculpture, which, with the concentrics, may be seen from within.

Dimensions of Type.-Length, 2.50; breadth, 1.75; depth, 1.25 mm. Locality.-Dredged off Rhyll, Western Port, about 6 fathoms. Type taken alive.

Obs.—This rare and elegant little species has an Australian ally in M. perstriata, Hedley (P.L.S., N.S.W., 1906, Vol. XXXI., Part 3, p. 472, pl. 36, f. 9, 10), from which it differs in its broader form, and the peculiar capping of the umbo, this latter feature serving as a useful recognition mark. From its Victorian congeners it is easily distinguished by the narrow beam. Consistency of shape is not apparent, variation existing as regards depth and width of the convexity. The measurements of our few specimens differ considerably, one valve attaining the dimensions of 3.50×2.25 mm.

Type in Mr. C. J. Gabriel's collection.

EXPLANATION OF PLATE IX.

Fig. 1.-Montacuta dromanaensis, sp. nov. Interior, left valve.

Fig. 2.-Montacuta dromanaensis, sp. nov. Interior, right valve.

Fig. 3.-Montacuta dromanaensis, sp. nov. Exterior.

Fig. 4.-Montacuta dromanaensis, sp. nov. Exterior, dorsal view.

Fig. 5.-Condylocardia chapmani, sp. nov. Interior, left valve.

Fig. 6.-Condylocardia chapmani, sp. nov. Interior, right valve.

Fig. 7.-Condylocardia chapmani, sp. nov. Exterior.

Fig. 8.—Condylocardia chapmani, sp. nov. Exterior, dorsal view. Fig. 9.—Modiolaria rhyllensis, sp. nov. Exterior.

Fig. 10.—Modiolaria rhyllensis, sp. nov. Exterior, dorsal view. The figures are variously magnified.

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